

Dkt. No.: MR2349-358/DIV2

AMENDMENTS TO THE CLAIMS:

1. (twice amended) A bubble cycling heat exchanger, comprising at least one closed fluid loop having a liquid therein and being in thermal contact with a heat absorbing source through a heat conducting block; the loop having a bubble generator for generating bubbles in the liquid, and an externally mounted expanding area installed adjacent and in fluid communication with the loop; the loop being formed with a guide region from which bubbles are easily separable and a radiator, wherein responsive to overheating of the heat absorbing source, the bubble generator generates bubbles and by an unequilibrium formed at the guide region of the loop, the bubbles separate from the guide region so that the liquid in the loop flows therethrough for transferring heat from the heat absorbing source to the radiator, the loop operating continuously until a thermal equilibrium is achieved.

2. (canceled)

3. (previously presented) The bubble cycling heat exchanger as claimed in claim 1, wherein the loop is installed with a fin set.

4. (canceled)

5. (original) The bubble cycling heat exchanger as claimed in claim 3, wherein one side of the fin set is connected to a blower.

6. (currently amended) The bubble cycling heat exchanger as claimed in claim 3, wherein further comprising a blower is connected above the top surface of the fin set.

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7. (currently amended) The bubble cycling heat exchanger as claimed in claim 3, wherein further comprising a blower is connected above the top surface of the fin set.

8. (original) The bubble cycling heat exchanger as claimed in claim 1, wherein the bubble generator is a spiral wire embedded in the loop.

9. (original) The bubble cycling heat exchanger as claimed in claim 1, wherein a bubble generator is installed within the heat conducting block.

10. (original) The bubble cycling heat exchanger as claimed in claim 1, wherein a guide region is installed in the heat conducting block.

11. (canceled)

12. (canceled)

13. (canceled)

14. (previously presented) The bubble cycling heat exchanger as claimed in claim 1, further comprising a plurality of closed fluid loops disposed in parallel and in thermal contact with the heat absorbing source.

15. (previously presented) The bubble cycling heat exchanger as claimed in claim 14, wherein the plurality of loops are symmetric with respect to left and right sides of the heat absorbing source.

16. (currently amended) The bubble cycling heat exchanger as claimed in claim 14, wherein the plurality of loops are alternatively arranged at with respect to left and right sides, alternatively of the heat absorbing source.

17. (canceled)

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